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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, HUY D

ART UNIT	PAPER NUMBER
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2681

12

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/665,178

Applicant(s)

GILBERT, DAVID

Examiner

Huy D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 and 37-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12,18,26,34 and 41 is/are allowed.
- 6) ☒ Claim(s) 1-7,9-11,13-15,17,19-23,25,27-31,33,37,38 and 40 is/are rejected.
- 7) ☒ Claim(s) 8,16,24,32 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The restriction requirement (paper No. 10) mailed June 3, 2004 is vacated. Response to the amendment filed March 12, 2004 is as follow:

Response to Arguments

2. First, the applicant stated that the controller of claim 1 is part of the telecommunication system, not part of the transmitter of the wireless phone. The examiner states that the above limitation is not found in claim 1. The controller as broadly claimed in claim 1 reads on the control unit of Miyake (col. 2, line 22).

Secondly, since claim 1 does not specify if RF emission level is an absolute, average, or RMS..., the limitation "RF emission" as cited in claim 1 reads on RF output signal taught in Miyake (col. 3, lines 24-25).

Third, the applicant stated that Miyake does not teach the controller "controls interface device to maintain the RF emissions of the wireless phone below a predetermined level".

The examiner points to column 1, lines 25-28 and column 3, lines 18-36 where the preceding limitation is taught.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-2, 4-7, 10-11, 13, 15, 19-20, 22-23, 27-28, 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbefin et al. (U.S. Patent No. 6,269,243) in view of Miyake (U.S. Patent No. 5,732,334).

Regarding claims 1-2, 4-7, 10-11, 13, 15, 19-20, 22-23, 27-28, 30-31, a telecommunication system, comprising: an interface device (e.g., device 1) on board an aircraft that interfaces with a wireless phone (e.g., personal radio communication means R) of a user inside the aircraft and with a wireless bearer system (FIG. 1; Col. 3, lines 40-45). Corbefin et al. do not clearly teach a controller that controls RF emissions of the wireless phone to maintain the RF emissions below a predetermined level. Miyake teaches a transmitter that includes a control unit for controlling the transmitter RF output to a predetermined power (Col. 2, lines 21-34; Col. 3, lines 19-37) to conform to a standard in which the transmitter is operating (col. 1, lines 25-28). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Miyake to Corbefin et al.'s system to have means of authority 5 compel radio means R to operate to a predetermined level as taught by Miyake to conform to a standard in which the transmitter is operating.

5. Claims 3, 14, 21, 29, 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbefin et al. (U.S. Patent No. 6,269,243) in view of Miyake (U.S. Patent No. 5,732,334) and in further view of Zicker (U.S. Patent No. 5,995,833).

Regarding claims 3, 14, 21, 29, 37-38, the combination of Corbefin et al. and Miyake does not teach registering the wireless phone as a roaming subscriber through the SATCOM system to a cellular network and then with a public switched telephone network. Zicker teaches registering the wireless phone as a roaming subscriber through the SATCOM system to a cellular

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network and then with a public switched telephone network (Fig. 1; col. 8, line 66 – col. 9, line 22) for system validation and establishing roaming mode (col. 9, line 18). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Zicker to the system of combination of Corbefin et al. and Miyake for system validation and establishing roaming mode.

6. Claims 9, 17, 25, 33, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbefin et al. (U.S. Patent No. 6,269,243) in view of Miyake (U.S. Patent No. 5,732,334) and in further view of Ray et al. (U.S. Patent No. 6,108,539).

Regarding claims 9, 17, 25, 33, 40, the combination of Corbefin et al. and Miyake does not teach direct communication between the wireless phone and the cellular system when the aircraft is on the ground. Ray et al. teach a multidimensional cellular mobile telecommunication system that can communicate with both ground-based and non-terrestrial mobile subscriber stations(col. 3, lines 25-54). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Ray et al. to the system of combination of Corbefin et al. and Miyake to extend the usage of existing cellular mobile network to non-terrestrial mobile subscribers as taught by Ray et al. (col. 3, lines 49-52).

Allowable Subject Matter

7. Claims 8, 16, 24, 32, 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 12, 18, 26, 34, 41 are allowed. The following is an examiner's statement of reasons for allowance:

Regarding claims 12, 18, 26, 34, 41, the cited prior arts fail to teach a telecommunication system, comprising:

an interface device on board an aircraft that interfaces with a wireless phone of a user inside the aircraft and with a SATCOM system, interface device receiving signals from and transmitting signals to the wireless phone, receiving signals from and transmitting signals to the SATCOM system, and interfacing through the SATCOM system to a cellular network and then with a public switched telephone network to register the wireless phone as a roaming to subscriber on the contacted cellular network;

a controller that controls interface device to maintain RE emissions of the wireless phone below a predetermined level, the predetermined level being a level above which RF emissions will interfere with aircraft systems;

a SATCOM gateway on board the aircraft that converts signals received from the wireless phone to protocols of the SATCOM system and that converts signals received from the SATCOM system to protocols of the wireless phone;

an antenna in a cabin of the aircraft that receives output signals from the wireless phone and conveys the output signals to interface device;

a media converter that conveys the signals between antenna and interface device;

an RF detector that detects unwanted RF emissions above the predetermined level and unsupported cellphone types, wherein controller alerts crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected by RF detector; and

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an external antenna that respectively transmits and receives direct cellular signals to and from the wireless phone when the aircraft is on the ground.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D Nguyen whose telephone number is 703-305-3283. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Erika A Gary can be reached on 703-308-0123. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HW

06/24/04


ERIKA GARY
PATENT EXAMINER